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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,247	03/18/2004	Arthur L. Backman	200TR388	5972
37535	7590	04/19/2005		
NOVEON IP HOLDINGS CORP. 9911 BRECKSVILLE ROAD CLEVELAND, OH 44141-3247				
			EXAMINER RAYFORD, SANDRA M	
			ART UNIT 1772	PAPER NUMBER
DATE MAILED: 04/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/803,247

Applicant(s)

BACKMAN ET AL

Examiner

Sandra M. Nolan-Rayford

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 5, 6 and 8-10 is/are rejected.  
7) ☒ Claim(s) 4, 7, 11 and 12 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claims***

1. Pursuant to the entry of any amendments in the 28 January 2005 response ("the last response"), claims 1-12 are pending.

### ***Allowable Subject Matter***

2. Claims 4, 7, 11, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See sections 4-5 of the 26 July 2004 office action ("the last office action").

### ***Rejection Maintained***

3. The 35 USC 103 rejection of claims 1-3, 5-6 and 8-10 as unpatentable over JP 07179717A (abstract) in view of Jackson et al (US 6,730,401), as set forth in section 8 of the last office action, is maintained for reasons of record.

### ***Summary of Base Claims***

4. Claim 1 covers a multilayer pipe comprising:
  - i- an outer layer of segmented thermoplastic copolyester elastomer, and
  - ii- an annular core selected from the group consisting of:
    - chlorinated polyvinyl chloride (CPVC)
    - blends of CPVC with  $\leq 25\%$  polyvinyl chloride (PVC),wherein:
  - the core is coextensive with essentially the entire length of the body,
  - the outer layer is cohesively bonded to the core in a laminate, and
  - the copolyester is derived from one or more dicarboxylic acids, one or more glycols and one or more low MW diols.

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5. Claim 8 covers a method of making an elongated hollow body comprising the step of:

concurrently extruding an annular core of PVDC/PVC of uniform thickness, which thickness is from 0.95mm to 1.375 mm and an outer tubular layer of segmented thermoplastic copolyester elastomer with a Shore D hardness of 40 to 72 overlaying the core in substantially uniform thickness, with the body being bonded to the core cohesively and the wall thickness of the copolyester layer permitting the body to satisfy plumbing codes for PPVC.

6. It is noteworthy that neither claim 1 nor claim 8 requires that the CPVC/PVC layer or the copolyester layer contain no other polymers.

### ***Response to Arguments***

7. Applicant's arguments filed in the last response have been fully considered but they are not persuasive.

Those arguments will be responded to in the order in which they were presented.

On page 6 of the last response, applicants argue that the Japanese abstract is not a proper teaching against the claims because its PVDC layer contains other polymers.

However, as was pointed out in the summary of base claims section, above, applicants' claims do not exclude mixed polymers from the claimed core layers.

On page 7 of the response, applicants argue that the Jackson patent is concerned with a sheet and, therefore, cannot be a proper basis for rejecting claims covering pipes and their production.

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However, Jackson teaches, that its copolyester and CPVC materials may be coextruded and that the composites made therefrom have dimensional stability and thermoformability. See the fourth paragraph in section 8 of the last office action.

It is deemed a matter of engineering choice/properties optimization to employ the composites taught by Jackson when making the pipes of the Japanese abstract, since the Jackson patent teaches that its polyester/CPVC composites are dimensionally stable and thermoformable. The skilled artisan, at the time of the invention, would have presumed dimensional stability and thermoformability to be desirable in pipes.

***Citation as of Interest***

8. Auvil et al (US 6,000,436) is cited for its teaching that CPVC can be used to make tubular coverings for metal pipes. It is noted that the CPVC layers in Auvil's pipes are covered with layers containing other polymers.

***Final Rejection***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action.

If a first reply is filed within TWO MONTHS of the mailing date of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action.

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In no event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Conclusion***

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can be reached Monday through Thursday, from 6:30 am to 4:00 pm, ET.

If attempts to reach the examiner are unsuccessful, contact her supervisor, Harold Pyon, at 571/272-1498.

The fax number for patent application documents is 703/872-9306.

*S. M. Nolan-Rayford*  
S. M. Nolan-Rayford  
Primary Examiner  
Technology Center 1700

10803247(20050418)